



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,528	07/27/2001	Ferdinand Grog	Q63846	7040

7590 06/23/2003

SUGHRUE MION ZINN MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER

NGUYEN, CHAU N

ART UNIT	PAPER NUMBER
----------	--------------

2831

DATE MAILED: 06/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/915,528

Applicant(s)

GROGL ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wargotz et al. (3,852,518) in view of McGregor et al. (6,403,890).

Wargotz et al. discloses a cable with at least one transmission element, which is surrounded by a sheath of insulation material, wherein the sheath consists of only an inner layer and an outer layer (Fig. 1), which are made of materials being firmly bonded together when the outer layer is extruded around the inner

layer (col. 3, lines 8-18) (re claim 1). Wargotz et al. also discloses the inner and outer layers being made of the same base material (re claim 8), and there is no separate adhesive layer between the inner and outer layers (re claim 9).

Wargotz et al. does not specifically disclose the values for tensile strength and elongation at break of the inner layer are significantly lower than those of the outer layer (re claims 1 and 9).

McGregor et al. discloses a cable comprising a sheath consisting of an inner layer and an outer layer, wherein additives are mixed into the inner layer (col. 7, lines 37-38) to resist insulation degradation. It would have been obvious to one skilled in the art to mix additives as taught by McGregor et al. in the inner layer of Wargotz et al. to resist insulation degradation. Noted that since the inner layer includes additives, the values for tensile strength and elongation at break of the inner layer are significantly lower than those of the outer layer (re claims 1, 8 and 9).

Re claims 2 and 3, Wargotz et al. discloses that the thickness of the outer layer can be the same, less or greater than that of the inner layer. Therefore, it would have been obvious that depending on the specific use of the resulting cable, one skilled in the art would choose a suitable thickness ratio of the inner and outer layers, including 60:40 and 40:60.

3. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wargotz et al. in view of McGregor et al. as applied to claim 1 above, and further in view of Livingston et al.

Livingston et al. discloses a cable comprising a sheath which comprises an inner layer (28) and an outer layer (30), wherein the values for tensile strength and elongation at break of the inner layer (28) are significantly lower than those of the outer layer (30) (see the C&M document attached herewith, etc. the inner layer being polyethylene and the outer layer being PVDF).

Livingston et al. also discloses the tensile strength of the inner layer being approximately half of that of the outer layer and being about 20 N/mm², the elongation of the inner layer being no more than approximately one third of that of the outer layer and being about 150%. It would have been obvious to one skilled in the art to apply the teaching of Livingston et al. in the cable sheath of Wargotz et al. such that the cable is stable at moderately high temperatures.

Response to Arguments

4. Applicant's arguments filed May 27th 2003 have been fully considered but they are not persuasive.

Applicant argues that the Office Action has not established a *prima facie* case of obviousness because the three basic criteria to establish a *prima facie* case have not been presented in the Office Action. This argument is not found persuasive because such criteria are being presented in the Office Action. Specifically, the combination of Wargotz et al. and McGregor et al. teach all the claims limitations (third condition), and it is suggested by McGregor et al. that including additives in the inner layer would provide resistance to degradation of the insulation due to high voltage passing through the conductor (first and second conditions). Accordingly, a *prima facie* case of obviousness has been established.

Applicant also argues that Wargotz et al. and McGregor et al. are both completely silent on the relative tensile strength and elongation at break of the inner and outer layers. Examiner would disagree. McGregor et al. teaches additives being added in the inner layer, and it is the fact that additives are mixed into the base material of the inner layer that result in the lower values of tensile strength and elongation at break of the inner layer, as claimed in the claimed invention (claim 8). Accordingly, McGregor et al. is not completely silent about the tensile strength and the elongation at break of the inner and outer layers.

Applicant then argues that Wargotz et al. is directed to an underground power cable, while McGregor et al. is directed to magnet wire insulation that can

withstand voltage from inverter driven motors. In response to this argument, it is found that both Wargotz et al. and McGregor et al. are directed to electrical cables. Therefore, it is appropriate to use the teaching of McGregor et al. to modify the cable of Wargotz et al.

Summary

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305 3432 for regular communications and (703) 305 1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Chau N Nguyen
Primary Examiner
Art Unit 2831

CN
June 16, 2003